

# SPECIFICATION SHEET FOR SO<sub>2</sub> SENSOR TYPE SO<sub>2</sub>/SF-100

#### PERFORMANCE CHARACTERISTICS

Nominal Range	0 – 100 ppm
Maximum Overload	500 ppm
Inboard Filter	To remove H₂S and HCl
Expected Operation Life	2 years in air
Output Signal	370 ± 70 nA/ppm
Resolution	0,5 ppm
Temperature Range	- 20 ℃ to 45 ℃
Pressure Range	Atmospheric ± 10%
Pressure Coefficient	No data
T <sub>90</sub> Response Time	< 20 sec
Relative Humidity Range	15 % to 90 % R.H.
	non-condensing
Typical Baseline Range (pure air, 20℃)	< 0,4 ppm
Maximum Zero Shift (+20℃ to +40℃)	N.D.
Long Term Output Drift	< 2 % signal
	loss/month
Recommended Load Resistor	10 Ohm
Bias Voltage	Not required
Repeatability	< 2 % of signal
Output Linearity	Linear

#### **CROSS-SENSITIVITY DATA**

Interfering Gas	Concentration	Reading
CO	100 ppm	< 1 ppm
H <sub>2</sub> S	20 ppm	1 ppm
NO	100 ppm	0 ppm
NO <sub>2</sub>	100 ppm	~ -125 ppm
H <sub>2</sub>	100 ppm	< 1 ppm
Ethylene	100 ppm	0 ppm
HCI	20 ppm	1 ppm

Performance data conditions: 20 ℃, 50% RH and 1013 mbar

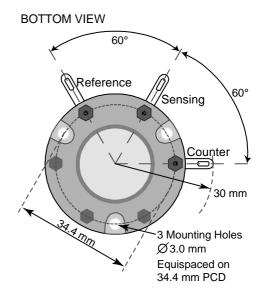
## **APPLICATIONS**

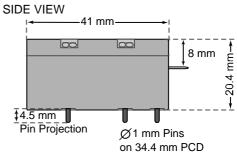
Safety and Environmental Control

## PHYSICAL CHARACTERISTICS

Weight	~ 32 g
Position Sensitivity	None
Storage Life	Six months in
	container
Recommended Storage	5 ℃ – 20 ℃
Temperature	
Warranty Period	12 months from date
	of dispatch

#### **Standard-Size Outline Dimensions**





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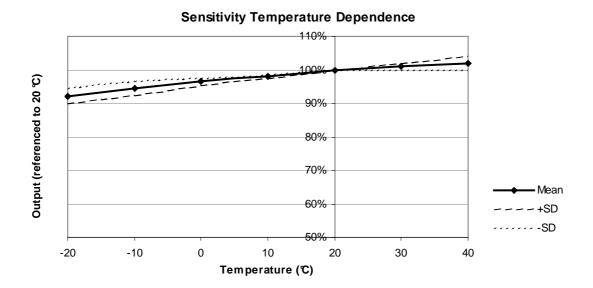
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### **TEMPERATURE DEPENDENCE (Provisional)**

The output of an electrochemical sensor varies with temperature. The graphs below show the variation in output with temperature for this type of sensor. The results are shown in the graphs as a mean for a batch of sensors, along with confidence intervals corresponding to  $\pm 3$  times the standard deviation. The sensitivity dependence is expressed as a percentage of the signal at 20 °C. The shift in bas eline is shown in ppm referenced to 20 °C.



The baseline is virtually not affected by changes in temperature.

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